



Attorney Docket No.: 9289-3

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Gary Mitchell et al.
Application No.: 09/998,039
Filed: November 30, 2001
For: BICEPS CURL MACHINE

Group Art Unit: 3764
Examiner: F. Mathew

Date: October 25, 2004

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**TRANSMITTAL OF APPEAL BRIEF
(PATENT APPLICATION--37 C.F.R. § 41.37)**

1. Transmitted herewith is the APPEAL BRIEF and PETITION FOR EXTENSION OF TIME for the above-identified application, pursuant to the Notice of Appeal filed on June 25, 2004.

2. This application is filed on behalf of
☐ a small entity.

3. Pursuant to 37 C.F.R. § 1.17(c), the fee for filing the Appeal Brief is:
☐ small entity \$170.00
☒ other than small entity \$340.00

Appeal Brief fee due \$340.00

☒ Any additional fee or refund may be charged to Deposit Account 50-0220.

Respectfully submitted,

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APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37

Sir:

This Appeal Brief is filed pursuant to the "Notice of Appeal to the Board of Patent Appeals and Interferences" filed on June 25, 2004.

REAL PARTY IN INTEREST

The real party in interest is Nautilus Human Performance Systems, Inc., Independence, Virginia, pursuant to the Assignment from the inventors recorded at the U.S. Patent and Trademark Office on July 10, 2004 on reel number 014272 and frame number 0367.

RELATED APPEALS AND INTERFERENCES

Appellants are aware of no appeals or interferences that would be affected by the present appeal.

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STATUS OF CLAIMS

Claims 1-38 are pending in the present application as of the filing date of this Brief. As of the filing date of this Brief, Claims 1-38 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over "Time Machines by Nautilus" (Time Machines) in view of U.S. Patent No. 5,897,467 to Habing (Habing) in the Final Office Action dated December 30, 2003 (the Final Action). Appellants appeal the final rejection of Claims 1-38.¹

¹ Appellants note the following informality in the Claims 1, 13, 24, and 33: The term "retracted" should be replaced with the term "curled" in order to provide antecedent basis for

STATUS OF AMENDMENTS

An Amendment Filed With Appeal Brief is submitted herewith. The Amendment is made to clarify the claims and has not been entered. It is noted that the Claim Appendix reflects the claims prior to entry of the Amendment Filed With Appeal Brief. All previous amendments have been entered.

SUMMARY OF CLAIMED SUBJECT MATTER

The patent application, as recited in Claims 1-38, relates to an exercise machine for exercising the biceps muscles of a user. With reference to embodiments of the present invention in **Figures 1, 2 and 6**, the machine **10** includes a frame **11** and a seat assembly **13**, which includes a seat **34** that is mounted to the frame **11** and is configured to receive a seated user. See Specification, page 4, lines 13-16; page 5, line 24 – page 6, line 4. **Figures 1-2** are reproduced below.

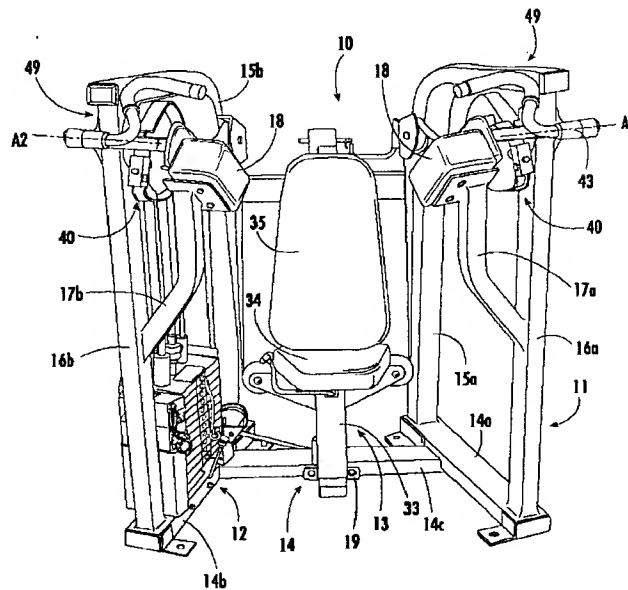


FIG. 1.

the extended and curled positions. See Claim 1, line 14; Claim 13, line 15; Claim 24, lines 9 and 13; and Claim 33, line 14. However, Appellants submit that the meaning of the claims is clear for purposes of this appeal and will request an appropriate amendment prior to any issuance of the present application.

A pair of support pads **18** are mounted to the frame **11** forwardly of and above the seat **34**. Each of the support pads **18** are positioned to engage one of the upper arms of the user. *See Specification, page 4, lines 30-32.* A pair of movement arm units **40** are pivotally interconnected with the frame **11** and move about respective axes of rotation **B1, B2** that extend through the seated user's elbows. Each of the pair of movement arm units **40** are configured to engage at least one of the forearms and the hands of the user. Each of the pair of movement arm units **40** are movable between an extended position, in which the user's arms are substantially straight, and a retracted or curled position, in which the user's arms are bent. The axes of rotation **B1, B2** remain stationary as the movement arm units **40** move between the extended and retracted positions. *See Specification, page 6, lines 5-24 and Figures 2-3.* A resistance system, such as a weight stack **12**, is connected with the movement arm units **40** and provides resistance to rotation of the movement arm units **40** as they move from the extended position to the retracted position. *See Specification, page 5, lines 4-15.*

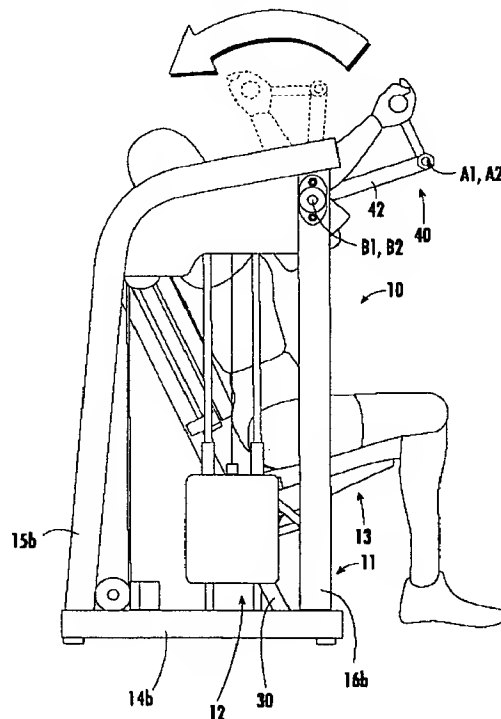


FIG. 2.

In some embodiments, the axes of rotation **B1, B2** forms an angle γ of between about 115 and 155 degrees. In other embodiments, the axes of rotation **B1, B2** forms an angle of

between 135 and 145 degrees. *See* Specification, page 6, lines 18-20 and **Figure 6** below.

According to further embodiments, the frame 11 includes a base 14 with legs 14a, 14b and a cross member 14c, rear uprights 15a, 15b that extend upwardly and forwardly from rear portions of the legs 14a, 14b, and front uprights 16a, 16b that extend upwardly from front portions of the legs 14a, 14b. The rear and front uprights 15a, 16a define plane P_1 and the rear and front uprights 15b, 16b define a plane P_2 . The planes P_1 , P_2 form an angle α (see **Figure 6**) between about 20 and 70 degrees, or between 35 and 45 degrees, or about 40 degrees. *See* Specification, page 4, lines 17-24.

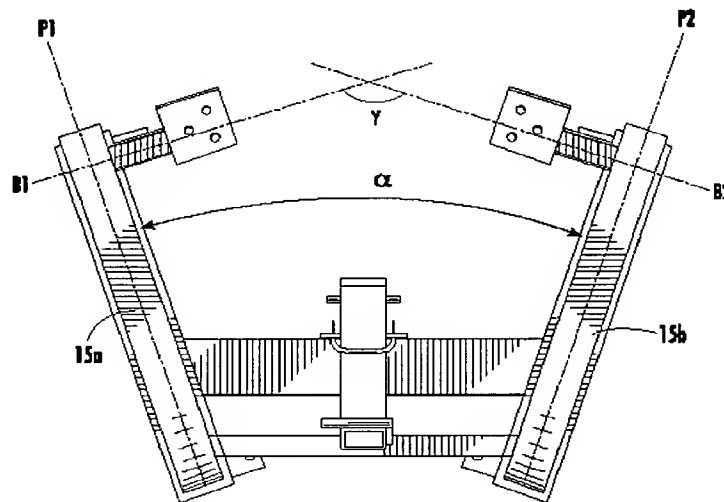


FIG. 6.

When the angles are of the magnitude described above, exercise can be more intense and efficient because the origin of the biceps within the shoulder can allow arm flexure to be more complete. *See* Specification, page 8, lines 25-29.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Whether Claims 1-38 are properly rejected under 35 U.S.C. § 103(a) as being unpatentable over Time Machines by Nautilus" (Time Machines) in view of U.S. Patent No. 5,897,467 to Habing (Habing).

ARGUMENT

A. Introduction

To establish a *prima facie* case of obviousness, the prior art reference or references when combined must teach or suggest all of the recitations of the claim, and there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. M.P.E.P. § 2143. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. M.P.E.P. § 2143.01, citing *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990). As stated by the Court of Appeals for the Federal Circuit, to support combining references, evidence of a suggestion, teaching, or motivation to combine must be clear and particular, and this requirement for clear and particular evidence is not met by broad and conclusory statements about the teachings of references. *In re Dembiczak*, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). The Court of Appeals for the Federal Circuit has also stated that, to support combining or modifying references, there must be particular evidence from the prior art as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed. *In re Kotzab*, 55, U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000).

B. The Rejection

In the rejection of Claims 1-38, the Final Office Action cites paragraphs 3-38 of the Office Action mailed July 15, 2003 (the Non-final Office Action), which state that the subject matter of independent Claims 1, 13, 24 and 33 are obvious over Time Machines in view of Habing. More particularly, the Non-final Action concedes that Time Machines fails to disclose "the specific angles at which the pivot axes meet" (Claims 1, 24 and 33) and "front and rear uprights rising from respective legs" (Claim 13)². Habing is characterized as disclosing (a) "an analogous device including a pair of support pads mounted to a frame movement resistance arm units with the axes of rotation outwardly canted to an angle

² Presumably this omission also includes the recitation of the angle of planes defined by the uprights, as without uprights in Time Machine there can be no angle between such uprights.

approximately within the claimed range of the applicant," the Non-final Action at pages 2-3 (discussing Claim 1), page 7 (discussing Claim 24), and page 10 (discussing Claim 33), and (b) "an analogous device wherein the frame structure includes pairs of front and rear uprights, with each set of front and rear uprights defining a vertical plane, wherein the vertical planes form an angle with respect to one another approximately between 20 and 70 degrees." The Non-final Action at page 5 (discussing Claim 13). Based on these characterizations, the Non-final Action concludes that it would have been obvious to the ordinarily skilled artisan to combine the teachings of Time Machines with Habing to conceive the subject matter of Claims 1, 13, 24 and 33.

The Final Action affirms the arguments of the Non-final Action and further states that Time Machines teaches horizontal axes of rotation that extend through the seated user's elbows, and that the axes of rotation remains stationary as the movement arms move between the extended and retracted positions. The Final Action concedes that Habing does not disclose a stationary axes of rotation and states as follows:

Examiner agrees that the axes of rotation of Habing do not remain stationary, however, the angles formed in the horizontal plane by the axes of rotation at the elbow remain constant. Examiner has relied on this feature in combination with 'PA1 [Time Machines] as a base reference as Habing has chosen the angles based on suitability in biceps exercises. In response to the argument that Habing does not teach the desired angles, figure 7 of Habing shows that the elbow pads, and thus the angles of the axes of rotations appear to be at an angle approximately near the desired range as claimed by application. Furthermore, Examiner feels that the angles of the axes of rotation are germane to 'PA1 [Time Machines], and that the angles of axes of rotation as taught by Habing does not teach away from 'PA1 [Time Machines].

The Final Action at page 2-3.

C. Claims 1-39 are Patentable Because There is No Motivation to Combine Time Machines and Habing

Independent Claims 1, 13, 24 and 33, each recite, *inter alia*, that the axes of rotation of the movement arms remain stationary during the movement of the movement arms between the extended and retracted positions, and that the axes of rotation extend through the

seated user's elbows. As conceded in the Final Action, this is clearly not the case with the Habing apparatus. However, as noted above, the Final Action argues that it would have been obvious to combine the features of Time Machines (*e.g.*, that the axes of rotation remain stationary as the movement arms move between extended and retracted positions) with various features allegedly found in Habing. Appellants submit that the Examiner has provided no motivation for combining Time Machines and Habing. In fact, Habing teaches away from the proposed combination. Moreover, the angular relationships recited in Claims 1, 13, and 33 are not disclosed in either reference.

The Declaration of Gregory M. Webb (the Webb Declaration) is attached hereto in the Evidence Appendix. With respect to Time Machines, the Webb Declaration states that the biceps machine illustrated in Time Machines was constructed such that the pivot axes defined by the movement arms was approximately 90 degrees. *See* the Webb Declaration at para. 4. Also, the frame sections to which the movement arms were mounted define an angle of approximately 90 degrees. *Id.* As the Webb Declaration discusses, the Time Machines exercise machine had significant shortcomings, particularly for small and average-sized exercisers, and has not been manufactured for at least twenty-five years. *See* the Webb Declaration at para. 5. Typical biceps curl machines currently offered have pivot axes that are collinear. *Id.* at para. 6. The employment of the angular relationships recited in the claims can overcome the deficiencies of the Time Machines exercise machine and significantly improve the effectiveness and comfort of biceps curl machines. *See* the Webb Declaration at para. 7.

As discussed above, the Examiner has taken the position that Habing discloses "axes of rotation outwardly canted to an angle approximately within the claimed range of the applicant," the Non-final Action at pages 2-3. However, in contrast to the claimed invention, the Habing apparatus includes an arm member **38** that is pivotally attached at a pivot **44** to a frame upright member **42** at the approximate location of the user's shoulder, and an arm member **36** that is pivotally attached to the arm member **38** at a pivot **40** at the approximate location of the user's elbow. In use, the pivot **44** at the shoulder is stationary, but the pivot **40** that corresponds to the user's elbow joint moves considerably during the exercise stroke. **Figures 3-6** of Habing show the pivot **40** moving from a location near the seated user's waist

when the user's arms are extended to a position above the user's shoulder when the user's arms are bent.

Habing states that the motion described above is particularly desirable. More specifically, in describing exercise for the biceps and triceps, Habing states that:

Typical prior art exercises for these muscle groups restrict movement of the arm to the elbow joint only. While movement at the elbow joint causes the greatest contraction of these muscles, the biceps muscle can also be exercised by locking the elbow joint and lifting the arm against resistance by rotation solely at the shoulder joint. Likewise, the triceps muscle can be exercised by locking the elbow joint and pushing down against resistance with rotation solely at the shoulder joint. **However, the biceps and triceps muscles can be more completely and effectively exercised when both the elbow and shoulder joints are rotated with a large degree of rotation at the elbow joint and a proportionately smaller amount of rotation at the shoulder joint.**³

Habing at column 1, lines 22-35. The rotation of the shoulder joint described in Habing indicates that the axes of rotation of the machine that align with the elbow joints of the user move during the exercise stroke, and Habing clearly states that such movement is desirable. Thus, Habing clearly teaches away from a biceps exercise machine, such as that recited in independent Claims 1, 13, 24 and 33, in which the axes of rotation of the movement arms that are aligned with the elbows remain stationary. In turn, the quoted statements in Habing teach away from its combination with a Time Machines-style machine that has axes of rotation that remain stationary but which, as the Non-Final Action concedes, fails to disclose the angular relationships recited in Claims 1, 24, and 33⁴ and the pairs of front and rear uprights defining planes that form an angle of between 20 and 70 degrees as recited in Claim 13.⁵

³ It should be noted that it appears from **Figure 7** of Habing that the Habing machine is likely operated with the plane of the rotating backrest **62** parallel to the arm rests **52** (the arm rests **52** support the user's elbows). As such, in operation, the Habing machine would not meet the recitation from any of the independent claims.

⁴ This position is augmented by statements in the Webb Declaration (*see* Evidence Appendix), which provides numerous reasons why the ordinarily skilled artisan would have been disinclined to use a Time Machine-style apparatus in the first place.

⁵ In fact, the skilled artisan combining Time Machines with Habing would likely produce a

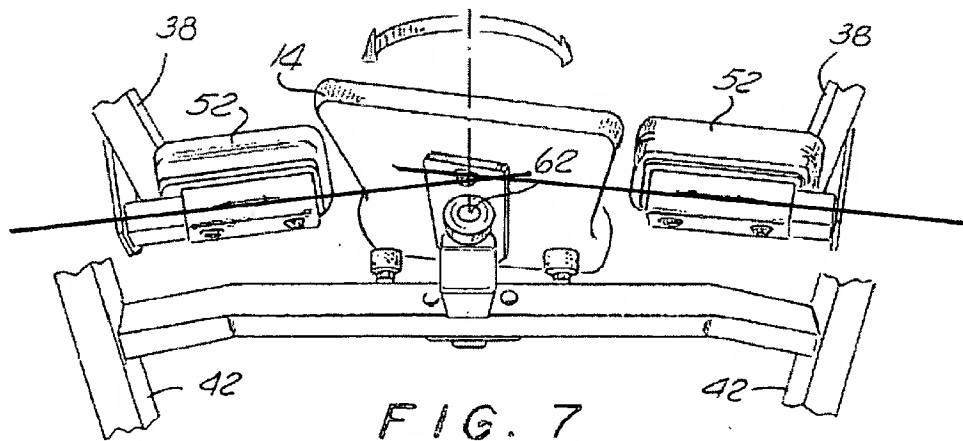
Therefore, Appellants submit that the combination of the teachings of Time Machines with the teachings of Habing is improper given that Habing clearly teaches away from this combination. The Final Action merely provides conclusory statements in support of the combination and provides no reasoning in support of its assertion that Habing does not teach away from Time Machines.

In light of the above remarks, Appellants submit that Time Machines and Habing do not provide a *prima facie* showing of obviousness. Accordingly, Appellants respectfully request that the rejection of Claims 1, 13, 24 and 33 and Claims 2-12, 14-23, 25-32, and 34-38 depending therefrom be reversed.

D. Claims 7, 25, and 30 are Additionally Patentable Because Time Machines and Habing do not Disclose Axes of Rotation Forming an Angle of Between About 135 and 145 Degrees

Claims 7, 25, and 30 are patentable for the reasons discussed above and are separately patentable for the reasons that follow.

Claims 7, 25, and 30 recite that the axes of rotation form an angle of between about 135 and 145 degrees. There is nothing in Habing to indicate that the angles of the apparatus shown therein actually meet the recitations set forth in the pending claims. As such, Appellants believe that this element of the claims is absent from the cited references.



biceps machine with the ninety-degree angle of the axes of rotation of Time Machines that allowed the elbow joint to move during the exercise stroke.

As noted above, the Final Action argues that **Figure 7** of Habing "shows that the elbow pads, and thus the angles of the axes of rotations appear to be at an angle approximately near the desired range as claimed by application." **Figure 7** of Habing is reproduced above. The axes of rotation have been added to **Figure 7**. As can be clearly seen in **Figure 7**, the angles of the axes of rotation are significantly greater than 145 degrees, which is the upper end of the range claimed in Claims 7, 25, and 30. Accordingly, this feature is not taught or suggested by Habing or Time Machines.

Moreover, the Final Action states that the "Examiner feels that the angles of the axes of rotation are germane to 'PA [Time Machines].'" Appellants agree with the Examiner that the angles of the axes of rotation are germane to Time Machines. However, because the angles are germane to Time Machines, it would not be obvious to modify the angles of rotation without a clear and particular motivation for the modification. No motivation for the modification has been provided.

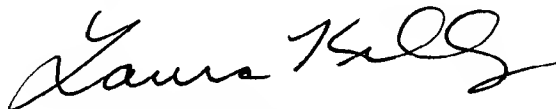
In addition, the Examiner has provided no motivation for the combination of Time Machines with Habing, and, as discussed above, Habing teaches away from such a combination.

Accordingly, Appellants request that the rejection of Claims 7, 25, and 30 be reversed for this additional reason.

CONCLUSION

On the entire record and in view of all the cited references, Appellants submit that Claims 1-38 are novel and non-obvious. Accordingly, it is respectfully requested that the Examiner's conclusions be reversed, and that this case be passed to issuance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Laura Kelley", with a stylized flourish at the end.

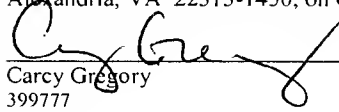
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Carcy Gregory
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CLAIMS APPENDIX

What is Claimed is:

1. An exercise machine for exercising the biceps muscles of a user, comprising:
 - a frame configured to rest on an underlying surface;
 - a seat mounted to the frame and configured to receive a seated user;
 - a pair of support pads mounted to the frame forwardly of and above the seat, each of the support pads being positioned to engage one of the upper arms and the elbows of the seated user;
 - a pair of movement arm units pivotally interconnected with the frame and movable about respective generally horizontal axes of rotation that extend through the seated user's elbows, each of the pair of movement arm units being configured to engage at least one of the forearms and the hands of the user, each of the pair of movement arm units being movable between an extended position, in which the seated user's arms are substantially straight, and a curled position, in which the user's arms are bent, the axes of rotation forming an angle of between about 115 and 155 degrees, the axes of rotation remaining stationary as the movement arms move between the extended and retracted positions; and
 - a resistance system connected with the movement arm units that provides resistance to rotation of the movement arm units as they move from the extended position to the curled position.
2. The exercise machine defined in Claim 1, wherein the seat and frame are configured such that the elevation of the seat relative to the frame is adjustable.
3. The exercise machine defined in Claim 2, wherein the seat elevation is adjustable such that, when the user is seated and the user's upper arms or elbows engage the support pads, the user's upper arms are angled upwardly from shoulder to elbow.
4. The exercise machine defined in Claim 3, wherein the user's upper arms are angled upwardly from shoulder to elbow at an angle of at least 5 degrees.

5. The exercise machine defined in Claim 1, further comprising a backrest positioned rearwardly of and extending upwardly from the seat, the backrest defining a plane that forms an angle of between about 75 and 95 with the underlying surface.

6. The exercise machine defined in Claim 1, wherein each of the support pads is positioned so that each of the user's elbows is located on a respective axis of rotation.

7. The exercise machine defined in Claim 1, wherein the angle formed by the axes of rotation is between 135 and 145 degrees.

8. The exercise machine defined in Claim 1, wherein the frame includes pairs of front and rear uprights rising from respective legs, each set of respective front and rear uprights and legs defining a generally vertical plane, the generally vertical planes defining an angle of between about 20 and 70 degrees.

9. The exercise machine defined in Claim 8, wherein the generally vertical planes define an angle of between about 35 and 45 degrees.

10. The exercise machine defined in Claim 1, wherein the resistance system comprises a weight stack.

11. The exercise machine defined in Claim 9, wherein each movement arm unit comprises a cam, and wherein the resistance system includes a belt attached to and engaging each cam.

12. The exercise machine defined in Claim 1, wherein each movement arm unit comprises a lever arm that pivots about its respective axis of rotation and a handle that is pivotally interconnected to the lever arm and engages one of the forearm and hand of the user, the axis of rotation of the handle relative to the lever arm being substantially parallel to

the axis of rotation of the movement arm unit relative to the frame.

13. An exercise machine for exercising the biceps muscles of a user, comprising:
a frame configured to rest on an underlying surface that includes pairs of front and rear uprights rising from respective legs, each set of respective front and rear uprights and legs defining a generally vertical plane, the generally vertical planes defining an angle of between about 20 and 70 degrees;
a seat mounted to the frame and configured to receive a seated user;
a pair of pads mounted to the frame forwardly of the seat, each of the pads being positioned to engage the upper arms of the seated user;
a pair of movement arm units pivotally interconnected with the frame and movable about respective generally horizontal axes of rotation that extend through the seated user's elbows, each of the pair of movement arm units being configured to engage at least one of the forearms and the hands of the user, each of the pair of movement arm units being movable between a curled position, in which the seated user's arms are bent, and an extended position, in which the user's arms are substantially extended, the axes of rotation remaining stationary as the movement arms move between the extended and retracted positions; and
a resistance system connected with the movement arm units that provides resistance to rotation of the movement arm units as they move from the extended position to the curled position.

14. The exercise machine defined in Claim 13, wherein the angle between the vertical planes is between about 35 and 45 degrees.

15. The exercise machine defined in Claim 13, wherein the angle between the axes of rotation is between about 135 and 145 degrees.

16. The exercise machine defined in Claim 13, wherein the seat and frame are configured such that the elevation of the seat relative to the frame is adjustable.

17. The exercise machine defined in Claim 16, wherein the seat elevation is adjustable such that, when the user is seated and the user's upper arms or elbows engage the support pads, the user's elbows are angled upwardly from shoulder to elbow.

18. The exercise machine defined in Claim 16, wherein the user's elbows are angled upwardly from shoulder to elbow at an angle of at least 5 degrees.

19. The exercise machine defined in Claim 13, further comprising a backrest positioned rearwardly of and extending upwardly from the seat, the backrest defining a plane that forms an angle of between about 75 and 95 with an underlying surface.

20. The exercise machine defined in Claim 13, wherein each of the pads is positioned to intersect with a respective axis of rotation.

21. The exercise machine defined in Claim 13, wherein the resistance system comprises a weight stack.

22. The exercise machine defined in Claim 21, wherein each movement arm unit comprises a cam, and wherein the resistance system includes a belt attached to and engaging each cam.

23. The exercise machine defined in Claim 13, wherein each movement arm unit comprises a lever arm that pivots about its respective axis of rotation and a handle that is pivotally interconnected to the lever arm and engages one of the forearm and hand of the user, the axis of rotation of the handle relative to the lever arm being substantially parallel to the axis of rotation of the movement arm unit relative to the frame.

24. An exercise machine for exercising the biceps muscles of a user, comprising:
a frame configured to rest on an underlying surface;
a seat mounted to the frame and configured to receive a seated user;

a pair of support pads mounted to the frame forwardly of and above the seat, each of the pads being positioned to engage the upper arms of the seated user;

a pair of movement arm units pivotally interconnected with the frame and movable about respective axes of rotation that extend through the seated user's elbows, each of the pair of movement arm units being configured to engage at least one of the forearms and the hands of the user, each of the pair of movement arm units being movable between a retracted position, in which the seated user's arms are bent, and an extended position, in which the user's arms are extended, the axes of rotation forming an angle of between about 115 and 155 degrees, the axes of rotation remaining stationary as the movement arms move between the extended and retracted positions;

a weight stack;

a first cable connected with the movement arms;

a second cable connected with the weight stack; and

a pulley bracket, the pulley bracket having a pair of upper pulleys that engage the first cable, the second cable being attached to the pulley bracket.

25. The exercise machine defined in Claim 24, wherein the seat and frame are configured such that the elevation of the seat relative to the frame is adjustable.

26. The exercise machine defined in Claim 25, wherein the seat height is adjustable such that, when the user is seated and the user's upper arms or elbows engage the support pads, the user's elbows are angled upwardly from shoulder to elbow.

27. The exercise machine defined in Claim 26, wherein the user's elbows are angled upwardly from shoulder to elbow at an angle of at least 5 degrees.

28. The exercise machine defined in Claim 24, further comprising a backrest positioned rearwardly of and extending upwardly from the seat, the backrest defining a plane that forms an angle of between about 75 and 95 with an underlying surface.

29. The exercise machine defined in Claim 24, wherein each of the support pads is positioned so that each of the user's elbows is located on a respective axis of rotation.

30. The exercise machine defined in Claim 24, wherein the angle formed by the axes of rotation is between 135 and 145 degrees.

31. The exercise machine defined in Claim 24, wherein the frame includes pairs of front and rear uprights rising from respective legs, each set of respective front and rear uprights and legs defining a generally vertical plane, the generally vertical planes defining an angle of between about 20 and 70 degrees.

32. The exercise machine defined in Claim 24, wherein each movement arm unit comprises a lever arm that pivots about its respective axis of rotation and a handle that is pivotally interconnected to the lever arm and engages one of the forearm and hand of the user, the axis of rotation of the handle relative to the lever arm being substantially parallel to the axis of rotation of the movement arm unit relative to the frame.

33. An exercise machine for exercising the biceps muscles of a user, comprising:
a frame configured to rest on an underlying surface;
a seat mounted to the frame and configured to receive a seated user;
a pair of support pads mounted to the frame forwardly of and above the seat, each of the support pads being positioned to engage one of the upper arms and the elbows of the seated user;
a pair of movement arm units pivotally interconnected with the frame and movable about respective generally horizontal axes of rotation that extend through the seated user's elbows, each of the pair of movement arm units being configured to engage at least one of the forearms and the hands of the user, each of the pair of movement arm units being movable between an extended position, in which the seated user's arms are substantially straight, and a curled position, in which the user's arms are bent, the axes of rotation forming an angle of between about 115 and 155 degrees, the axes of rotation remaining stationary as

the movement arms move between the extended and retracted positions; and

a resistance system connected with the movement arm units that provides resistance to rotation of the movement arm units as they move from the extended position to the curled position;

wherein the elevation of the seat and the support pads are such that, when a user is seated and the user's elbows or upper arms engage the support pads, the user's upper arms are angled upwardly from shoulder to elbow at an angle of at least 5 degrees.

34. The exercise machine defined in Claim 33, further comprising a backrest positioned rearwardly of and extending upwardly from the seat, the backrest defining a plane that forms an angle of between about 75 and 95 with the underlying surface.

35. The exercise machine defined in Claim 33, wherein each of the support pads is positioned so that each of the user's elbows is located on a respective axis of rotation.

36. The exercise machine defined in Claim 33, wherein the resistance system comprises a weight stack.

37. The exercise machine defined in Claim 36, wherein each movement arm unit comprises a cam, and wherein the resistance system includes a belt attached to and engaging each cam.

38. The exercise machine defined in Claim 33, wherein each movement arm unit comprises a lever arm that pivots about its respective axis of rotation and a handle that is pivotally interconnected to the lever arm and engages one of the forearm and hand of the user, the axis of rotation of the handle relative to the lever arm being substantially parallel to the axis of rotation of the movement arm unit relative to the frame.

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EVIDENCE APPENDIX

Attached Declaration of Gregory M. Webb Pursuant to 37 C.F.R. § 1.132 dated April 22, 2003 and submitted with the Response to Office Action filed April 30, 2003.